The total value of the launching contract was 7.38 million Euros. The commercial contract was made between Antrix Corporation, which is the commercial arm of Department of Space and a European company for launching the Italian satellite, AGILE. This satellite is equipped with scientific instruments capable of imaging distant celestial objects in x-ray and gamma ray regions of electromagnetic spectrum.

The successful launch has demonstrated the versatility and reliability of PSLV launches for different orbits and boosts the confidence of international customers for commercial launches on ISRO's launch vehicles in the market competed by USA, Russia, China, Ukraine and other European launch service providers.

**Weather prediction by TOPS**

4706. SHRIMATI N.P. DURGA: Will the PRIME MINISTER be pleased to state:

how exactly is the Terrestrial Observation and Prediction System (TOPS) works for predicting the weather conditions accurately;

the cost benefit ratio of TOPS;

how TOPS helps Andhra Pradesh since irrigation in Andhra Pradesh is a major problem;

whether Remote Sensing Application Centre in Andhra Pradesh has sought or approached National Remote Sensing Agency (NRSA) for help or assistance in this regard; and

if so, the details thereof?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) and (b) The Terrestrial Observation and Prediction System (TOPS) is a global programme to utilize terrestrial and atmospheric data and weather models to predict weather events. Accurate ' prediction of severe weather events can help in disaster management and save lives and property. Quantitative cost benefit analysis has not been made.

The Andhra Pradesh Secretariat Disaster Management Systems (APSDMS) is participating in the TOPS programme. The data from the ground stations such as automated rain gayges, weather stations and the gauges set up under the World Bank aided project is being utilized to monitor severe weather events affecting the State of Andhra Pradesh. The project is currently being carried out in a research mode. Once made operational, the TOPS can help in effective disaster management in the State for managing drought, cyclone etc.

and (e) AP Remote Sensing Application Centre has not approached National Remote Sensing Agency for any assistance in this regard.

**Assistance for Space Technology**

4707. SHRI KESHUBHAI S. PATEL:
SHRI JAYANTILAL BAROT:

Will the PRIME MINISTER be pleased to state:

whether the Government of Gujarat at any time requested for Centra! support from Human Resource Development in the applications of Space Technology; and

if so, the reaction of Government thereto?

THE MINISTER OF STATE IN THE PRIME MINISTER'S OFFICE (SHRI PRITHVIRAJ CHAVAN): (a) and (b) As part of National Natural Resources Management System (NNRMS) under the aegis of the Planning Commission for which the Department of Space, Government of India is the nodal agency, close coordinated activities pertaining to space technology applications are taken up jointly with the Bhaskaracharya Institute" of Space Applications and Geo-informatics (BISAG), Government of Gujarat, Gandhinagar. Further, the officials from the Gujarat Government periodically make use of the training and education facilities available at Space Application Centre, Ahmedabad; National Remote Sensing Agency, Hyderabad; and Indian Institute of Remote Sensing (IIRS), Dehradun towards acquiring proficiency in the field of remote sensing, geo-informatics and GPS Technology for natural resources and disaster management.